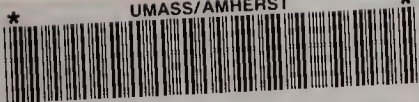


\*

UMASS/AMHERST

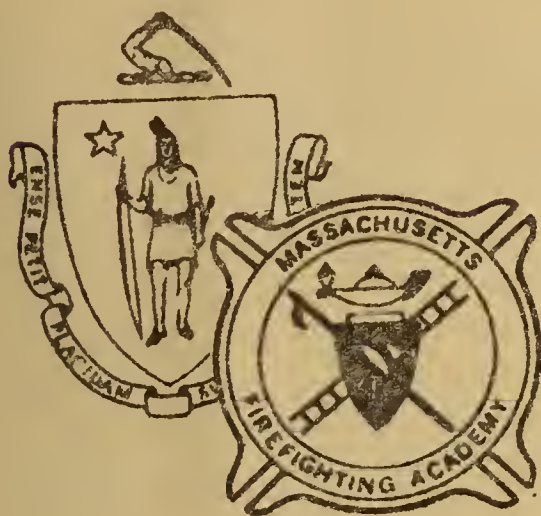
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# **ANNUAL REPORT**

**FISCAL YEAR 1979**

## **MASSACHUSETTS FIREFIGHTING ACADEMY**

## **MASSACHUSETTS FIRE TRAINING COUNCIL**



**JOSEPH L. DONOVAN**

Chief of Fire Training

Publication: #11739-21-2000-2-80

Approved: Alfred C. Holland, State Purchasing Agent

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The Commonwealth of Massachusetts  
Department of Education

59 Horse Pond Road, Sudbury, Massachusetts 01776

(617) 443-8926

The Honorable Edward J. King  
Governor of Massachusetts  
Boston, MA 02133

Your Excellency:

The Massachusetts Fire Training Council has been charged by Chapter 842 of the Massachusetts Acts of 1971 to:

"...consult with and advise the bureau of fire training in the division of occupational education relative to the following matters:-

1. The establishment of a minimum firefighting training standard for recruit firefighters and a minimum uniform training curriculum for all other levels of fire service personnel.
2. The establishment of minimum requirements for instructors employed in the bureau of fire training.
3. The location of the Massachusetts Firefighting Academy and area training centers.
4. The establishment of standards and procedures for approving facilities of employing agencies desirous of conducting training under the bureau."

To effect this charge, the Massachusetts Fire Training Council was extremely active this year.

In March of 1979 the Governor regretfully accepted the resignation of Deputy Chief Morton Shurtleff as Chairman and Chief Joseph Lawler as Vice Chairman as a result of their retirements from their respective departments. Chief Philip Monroe, representing the call chiefs of the Fire Chiefs Association of Massachusetts submitted his resignation also due to his retirement.

They have all served the Massachusetts Fire Training Council and the fire service of the Commonwealth with distinction and in the best tradition of cooperation and dedication. Their counsel will be sorely missed.

A major concern of the Training Council during this fiscal year was one which has concerned us every year in the past. In our capacity as advisors to the Academy, it is painfully apparent that the Academy is working to provide the best service available to the fire service community under the most adverse conditions in terms of both a lack of finances for programs, personnel, and equipment, as well as a lack of sites with which to present programs. The Recruit program, long a



major accomplishment of the Academy, has had to literally beg and borrow sites for the live fire training so necessary to the success of this and other programs. We are quickly running out of options. The Training Council has, in fiscal year 1979, stood by Chief of Fire Training Joseph Donovan in his efforts to the Department of Education for increased funding for vital Academy programs. In addition, the Training Council drafted legislation to be filed to convene a legislative committee for the study of a permanent site for the Academy as recommended in the five year plan.

Also of utmost importance to the Training Council and the Academy was Senate Bill S1118 filed by Senator Chester Atkins on behalf of the Fire Chiefs Association of Massachusetts relative to the mandatory training of firefighters. At the close of this fiscal year the bill was still in committee.

On a positive note, the Training Council continued its efforts in fostering communications and cooperation amongst the Academy and Training Council and other agencies and entities involved with the fire service. During fiscal year 1979 the Training Council continued to actively participate in the deliberations of the Massachusetts Joint Council of Fire Service Organizations. Representatives of the Council were present along with Academy staff members at meetings held at the National Fire Protection Association and the Factory Mutual System to familiarize each with the others operations and goals.

Additionally, on April 28 of this year, a meeting was held with myself representing the Council, Chief of Fire Training Joseph Donovan, Assistant Chief of Fire Training John Harrington, Commissioner of Public Safety Dennis Condon, Secretary of Public Safety George Luciano, Assistant Secretary of Public Safety George Tully, Director of Civil Defense Robert Cunningham, Executive Director of the Massachusetts Criminal Justice Training Council Gary Egan, and Major John Regan of the State Police. This meeting served to open lines of communications for continued cooperation between Public Safety and the Academy, and to reiterate the Academy's responsibility as the sole agency of the Commonwealth responsible for the training of firefighters. The personnel of Public Safety also stressed their support of the Academy and their willingness to cooperate fully with the Academy's parent Department, the Department of Education. I cannot stress enough the importance of this continued exchange of ideas and goals.

The Training Council has continued its advice and recommendations during fiscal year 1979 regarding the internal policies and procedures of the Academy. Suggestions and recommendations were made regarding such topics, among others, as:

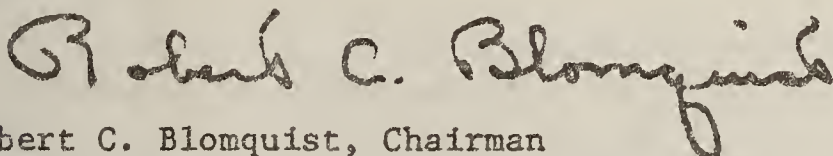
1. Instructor Qualifications - To insure proper screening of potential Academy instructors as well as evaluating present instructors.
2. Promotional Exams for Non-Civil Service Communities - A recommendation was made, despite opposition from the Chiefs Association, to remove the Academy from the examination business for those communities not under the jurisdiction of the Civil Service examination process.
3. LNG-LPG Firefighting School - One of the proudest moments for both the Training Council and the Academy was the official opening of this facility after so many years of hard work on the part of all involved. A detailed report of this facility can be found in the following pages

of the Annual Report but I would like to say at this point that this project represents a major accomplishment of the Training Council and the Academy.

It has been a fruitful year. Despite insufficient funding and a shortage of personnel, the Academy has continued to grow as exemplified by this year's Annual Report.

It is with pride that I commend to you the Annual Report of the Massachusetts Fire Training Council and the Massachusetts Firefighting Academy for Fiscal Year 1979.

Sincerely,

A handwritten signature in dark ink, reading "Robert C. Blomquist". The signature is written in a cursive style with a large, stylized "R" and "B".

Robert C. Blomquist, Chairman  
Massachusetts Fire Training Council

cc: Dr. Gregory B. Anrig, Commissioner of Education  
Dr. David Cronin, Associate Commissioner of Education



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The Commonwealth of Massachusetts  
Department of Education

59 Horse Pond Road, Sudbury, Massachusetts 01776

(617) 443-8926

Robert C. Blomquist, Chairman  
Massachusetts Fire Training Council  
59 Horse Pond Road  
Sudbury, MA 01776

As I report to you on the activities of my first full year as Chief of Fire Training for the Commonwealth, one event transcends all others. That was the tragic death in the line of duty of Captain John Constanza of the Framingham Fire Department. John was an enthusiastic, knowledgeable, dedicated Academy instructor who did his utmost to help his fellow firefighters. He strove for excellence and set an example for all that came in contact with him. I dedicate this Annual Report in his memory. May he rest in peace.

I would like to offer my special gratitude to the members of the Massachusetts Fire Training Council who retired from their positions in the fire service this past year and hence from their positions on the Council.

To Morton Shurtleff, Deputy Chief and Training Officer of the Brockton Fire Department, who represented the Massachusetts Institute of Fire Department Instructors. He served on the Council since its inception, the last four years as its Chairman.

To Joseph Lawler, Chief of the Wayland Fire Department, who represented the citizens of the Commonwealth.

To Philip Monroe, Chief of the Dover Fire Department, who represented the Fire Chiefs Association of Massachusetts as its Call Chief representative.

The Fire Service of the Commonwealth, its Firefighting Academy, and myself as Chief of Fire Training, owe a deep debt of gratitude to these three men for their invaluable advice and the many unselfish hours given in helping the Academy to better serve its constituency.

In Fiscal Year 1979, the Academy made great strides in fulfilling its mission of support, assisting, and supplementing the training efforts of the 371 organized fire departments within the Commonwealth.

The Academy strove to become more cost effective and efficient in the delivery of its many varied programs and services. This was a difficult task in light of restrictive budget limitations that have forced it to operate at level funding since Fiscal Year 1975.

If it were not for the dedication and diligence of the members of the administrative and instructional staff of the Academy, never could so few have accomplished so much with so little.



I feel that the Academy entered a new era of cooperation this past fiscal year, working closely with the Commissioner of Education, Gregory Anrig, and his staff; Associate Commissioner of Occupational Education, David Cronin and his staff; Secretary of Public Safety George Luciano and his staff; the Fire Science Coordinators of the Community College System; the Officers, Directors and members of the Fire Chiefs Association of Massachusetts; the Professional Firefighters Association of Massachusetts (AFL-CIO); the Massachusetts Institute of Fire Department Instructors; the Massachusetts Fire Prevention Association; the Massachusetts Fire Signal and Communications Association; the Fire Apparatus Maintenance Association; the Massachusetts Chapter of the International Association of Arson Investigators; the many regional fire service organizations throughout the state; and finally, the Massachusetts Joint Council of Fire Service Organizations, on which I am pleased to serve as Secretary.

It was also a pleasure to have served on Lieutenant Governor Thomas O'Neill's Arson Prevention Task Force, as Co-Chairman of the Fire Chiefs Association of Massachusetts Training and education Committee as well as liason for that Association to the Office of Emergency Preparedness, as a member of the Division of Personnel Administration's Fire Advisory Committee, and the Fire Science Advisory Committees of Middlesex and Northern Essex Community Colleges.

We as a Fire Service accomplished much towards attaining the goals set forth in the "Model Statewide Plan" which was approved by the United States Fire Administration in November 1978, but still more is left to be accomplished. We must continue to work together to solve our problems.

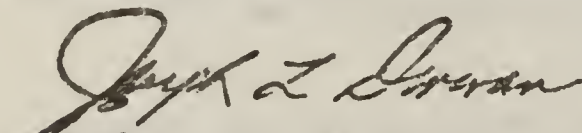
I feel the highlight of this year was the dedication and operation of the Academy's LNG-LPG Training Facility in Hopkinton. This facility does much to help the fire community deal with one aspect of the awesome hazardous materials situation we are forced to deal with. It was the culmination of eight long years of concerted work.

My foremost goal for the coming year is to see the initiation of plans to build a permanent training facility for the Academy and our annual funding increased to its proper level for the benefit of all in the Fire Service. The Academy cannot properly fulfill its mission by having to continuously beg and borrow facilities and equipment.

Finally, I would personally like to thank the Training Council for its advice, guidance, and support during the year.

Please accept this report as a report of progress.

Gratefully yours,



Joseph L. Donovan  
Chief of Fire Training

## **ANNUAL REPORT FISCAL YEAR 1979**

At the close of fiscal year 1979, the Massachusetts Firefighting Academy underwent a re-organization in an effort to utilize the severely limited resources, both in terms of finance and personnel, in the most cost-effective manner and to the best advantage of the fire service.

The Academy was divided into four major offices, each having the responsibility of different facets of Academy operation. In the following pages, we would like to both define the responsibilities of the different offices of the Academy and give a report of their activities during fiscal year 1979.





**OFFICE  
OF  
CHIEF OF FIRE TRAINING**

**JOSEPH L. DONOVAN**

**Chief Of Fire Training**

**JOHN E. HARRINGTON**

**Assistant Chief Of Fire Training**

**DAVA DUNNE**

**Administrative Assistant**





## Office of the Chief of Fire Training

Chief of Fire Training Joseph L. Donovan, with assistance of Assistant Chief of Fire Training John E. Harrington, and Administrative Assistant Dava Dunne, has the responsibility of directing the entire Academy operation as defined by Chapter 842 of the Massachusetts General Acts of 1971 which states, "...Massachusetts Firefighting Academy, and which shall be the sole agency of the commonwealth responsible for the training of firefighters.". In addition, the office also holds the responsibility of insuring that the policies and practices of the Academy are in keeping with those goals set by the Department of Education.

Financing for the expenses of the Massachusetts Fire Training Council are also under the auspices of this office.

(For an expanded report on the activities of this office please see Chief of Fire Training Joseph L. Donovan's introductory letter to the Massachusetts Fire Training Council...page 4).



**OFFICE**

**OF**

**ADMINISTRATIVE SERVICES**

**FRANCIS E. WINSLOW**

**Deputy Chief**

**LESLIE HOFFMAN**

**Principal Clerk**





Office of Administrative Services

Deputy Chief Francis E. Winslow

Principal Clerk Leslie Hoffman

Included in the daily routines of the Office of Administrative Services in the areas of personnel, fiscal control, buildings, grounds and equipment maintenance, purchasing and logistics, the following activities of special interest should be noted:

A comprehensive training equipment replacement schedule was initiated and partially implemented during fiscal year 1979. A five (5) year plan evolved with due consideration to life expectancy of all fire training equipment in use at the Academy. Due to limited and restricted fiscal appropriations all aspects of the plan were not fully implemented and it is contemplated to make a larger impact on these planning processes in future years.

Our ability to make a few sound purchases through surplus property reflected in great savings to the Academy. Two 1/4 ton trailers were received and utilized for the purpose of making portable cascade systems to support our Recruit and Regional programs. Also, a 2000 gallon water tank truck was utilized in support of Recruit programs at the flammable liquids pit.

The Maintenance division of the Academy has become more self-sufficient through the purchasing of some specialized equipment and were able to maintain and repair 95% of all equipment in our own shops reflecting great savings to the Academy and at the same time reflecting less "down-time" on use of equipment.

This office, working in close cooperation with the Sudbury School Department, was successful in prevailing on the Sudbury Town Meeting to appropriate \$7,000 of our rent monies to offset a State awarded bid to replace all old and obsolete heating control equipment in the Academy's leased building which should reflect substantial savings in next fiscal year's heating costs.

This office continues to be innovative in its approach to support of the Academy and its obligated training activities. This, despite the fact that continued restrictions on increased appropriations severely handicaps our day to day activities. "Locked in" budget figures over a six-year period are extremely frustrating, yet continued expansion of the Academy and its needed support is a tribute to the caliber of personnel supporting this office.





**OFFICE  
OF  
PROFESSIONAL DEVELOPMENT**

**LINWOOD LOWELL**

**Deputy Chief**

**JOANN KASPERSON**

**Clerk**



Office of Professional Development

Deputy Chief Linwood E. Lowell

Administrative Assistant Dava Dunne

This office constitutes primarily the delivery system for the various programs designed and developed under the Office of Technical Services. Once programs have been pilot-tested and deemed acceptable for the field they are assigned to this office under the supervision of one of several sub-office specialty fields.

It should be noted at this time that without the outstanding cooperation and assistance of the Chiefs and Training Officers of various fire departments who have lent the Academy unending support throughout all of the past years as well as fiscal year 1979, the Academy would not be able to reach the numbers of students with the variety of programs that are now available. Not only has the fire service of the Commonwealth assisted the Academy in determining the needs so that our programs can be offered where they will be most effective, but they have been extremely generous in allowing us the use of their facilities. Without facilities of its own, this cooperation has allowed the Academy to provide programs throughout the state.

The following are the various sub-offices of the Office of Professional Development.



Office of Regional Programs

Coordinator Deputy Chief Linwood Lowell

Clerk Joanne Kasperson

The Office of Regional Programs serves to deliver programs to two primary groups.

1. For those who for one reason or another cannot attend the full seven-week basic training program (volunteer or call firefighters for instance who would be unable to take such extended time from full-time jobs), regional programs enable them to take courses teaching the basics at their convenience.
2. For those who have taken advantage of our basic firefighting program, regional programs enable students to continue their education in the more advanced areas of firefighting such as flammable liquids, fire investigation, as well as a wealth of officer programs (see Officer Training). In addition these students may take basic regional programs that are offered as a refresher course.

The regional program system is one of our most effective delivery systems because of the convenience provided by being able to arrange for these programs to be taught week-ends, week-days, or week-nights, whichever will provide the most opportunity for the students. Another factor which makes this particular delivery system so attractive is the fact that these programs are provided on a "regional" basis. There will be times in any firefighter's career in which he will find himself at the scene of an incident working with firefighters from another community during a mutual aid situation. Unfortunately, for a number of reasons, it is not always possible for firefighters from neighboring communities to train together for such a circumstance. By offering courses which are open to a region rather than just one department, firefighters have the opportunity to receive the same training as well as encourage an interchange of ideas among departments.

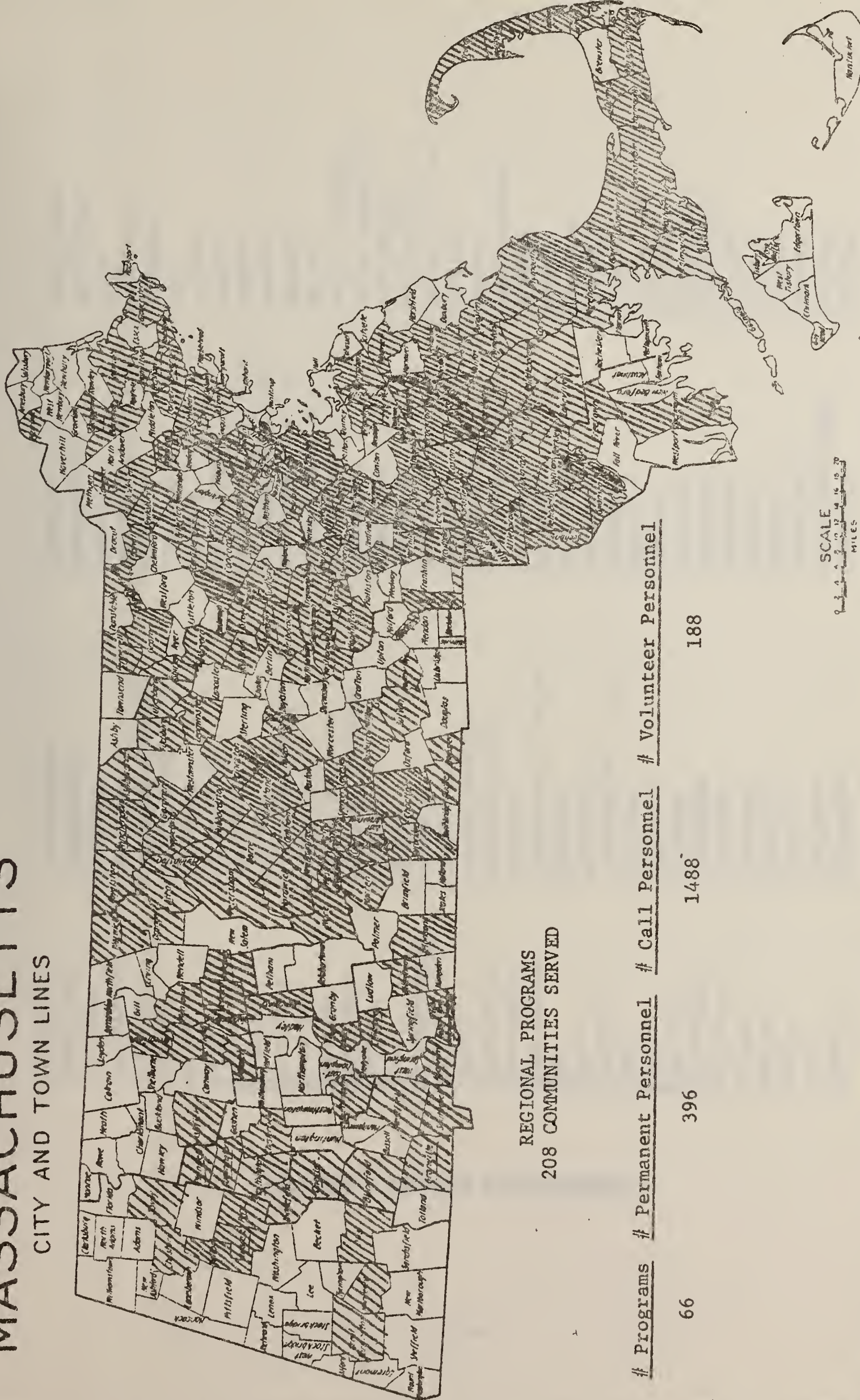
In addition, the Academy maintains a cadre of over 200 part-time instructors from across the state available to teach programs throughout the Commonwealth. Because of this, training is done in local fire stations or other local facilities, thereby enabling students to learn on their own equipment and apparatus.

During the fiscal year 1979, The Academy ran a total of 66 regional programs across the Commonwealth, awarding 1492 certificates of successful completion.



# MASSACHUSETTS

CITY AND TOWN LINES



REGIONAL PROGRAMS  
208 COMMUNITIES SERVED

# Programs	# Permanent Personnel	# Call Personnel	# Volunteer Personnel
66	396	1488	188



Abington	Cambridge	Granville	Marlboro
Acton	Carlisle	Great Barrington	Mashpee
Agawam	Carver	Greenfield	Maynard
Amherst	Charlton	Groton	Medford
Andover	Chatham	Halifax	Melrose
Arlington	Chelsea	Hamilton	Merrimac
Ashburnham	Cheshire	Hanson	Middleboro
Ashfield	Chester	Hardwick	Middlefield
Ashland	Chicopee	Harvard	Millbury
Athol	Concord	Harwich	Millis
Attleboro	Cummington	Hingham	Monson
Auburn	Dalton	Hinsdale	Montague
Avon	Danvers	Holbrook	Monterey
Fort Devens	Dartmouth District 3	Holden	Natick
Barnstable	Dedham	Hopedale	Needham
Osterville	Old Deerfield	Hopkinton	New Braintree
Cotuit	South Deerfield	Hubbardston	Newton
Hyannis	Dennis	Hudson	Norfolk
W. Barnstable	Dighton	Ipswich	North Attleboro
Barre	Dover	Kingston	Northboro
Bedford	Dudley	Lakeville	Northbridge
Bellingham	Nichols College	Lawrence	North Brookfield
Berkeley	E. Bridgewater	Leicester	North Reading
Beverley	Eastham	Leominster	Norton
Billerica	East Longmeadow	Leverett	Norwell
Blanford	Easton	Lexington	Norwood
Bolton	Falmouth	Lincoln	Oakham
Boston	Fitchburg	Longmeadow	Orange
Bourne	Foxboro	Lowell	Orleans
Boxford	Framingham	Lunenburg	Otis
Braintree	Cushing Hospital	Lynn	Pembroke
Bridgewater	Freetown	Lynnfield	Pepperell
Brockton	Gardner	Malden	Peru
Brookfield	Georgetown	Manchester	Petersham
Brookline	Gloucester	Mansfield	Phillipston

## COMMUNITIES SERVED - REGIONAL

Plainfield	Templeton
Plainville	Tewksbury
Plymouth	Truro
Plympton	Tyngsboro
Princeton	Wakefield
Provincetown	Walpole
Raynham	Ware
Rehoboth	Wareham Fire District
Rockland	Otis Air Force Base
Royalston	Onset Fire District
Rutland	Wareham Fire Dept.
Salem	Warren
Sandwich	Warwick
Savoy	Webster
Seekonk	Wellfleet
Sharon	Wenham
Sherbourne	Westboro
Shirley	West Boylston
Shutebury	West Bridgewater
Somerset	West Brookfield
Southampton	Westfield
Southboro	Weston
Southbridge	Westwood
South Hadley District 2	Weymouth
Southwick	Whately
Spencer	Whitman
Stoneham	Wilbraham
Stoughton	Winchendon
Stow	Winchester
Sturbridge	Woburn
Sudbury	Worthington
Sunderland	Wrentham
Sutton	Yarmouth
Swansea	
Taunton	

# COMMUNITIES SERVED - REGIONAL (continued)





## Office of Recruit Training

Co-coordinators: John Peltier, Fire Instructor II

William Hollick, Fire Instructor II

Perhaps one of the most important programs maintained by the Academy is the basic training of permanent, paid, probationary firefighters. It has long been a belief of the Academy that without a sound knowledge of the basics of firefighting, it will serve little purpose to attempt to teach the more advanced topics in the field.

The recruit training program is an intensive, semi-military type operation emphasizing hands-on training. There is classroom instruction in theory but 70% of the total hours of the program are devoted to putting classroom theory to practical application by performing tasks and evolutions, individually and as a member of a team, in exactly the same manner, or similar to that which will be utilized on the fireground. In the first few weeks of training the students perform these evolutions under non-fire conditions. As training progresses and the students gain a measure of efficiency these same evolutions are then repeated under controlled, live fire conditions.

The total program is designed to provide the knowledge required by the National Professional Fire Service Qualifications Standard 1001 for Firefighters, Level II. Students will also be qualified as First Responders upon successful completion of the program as per Chapter 111C of the General Acts of 1974.

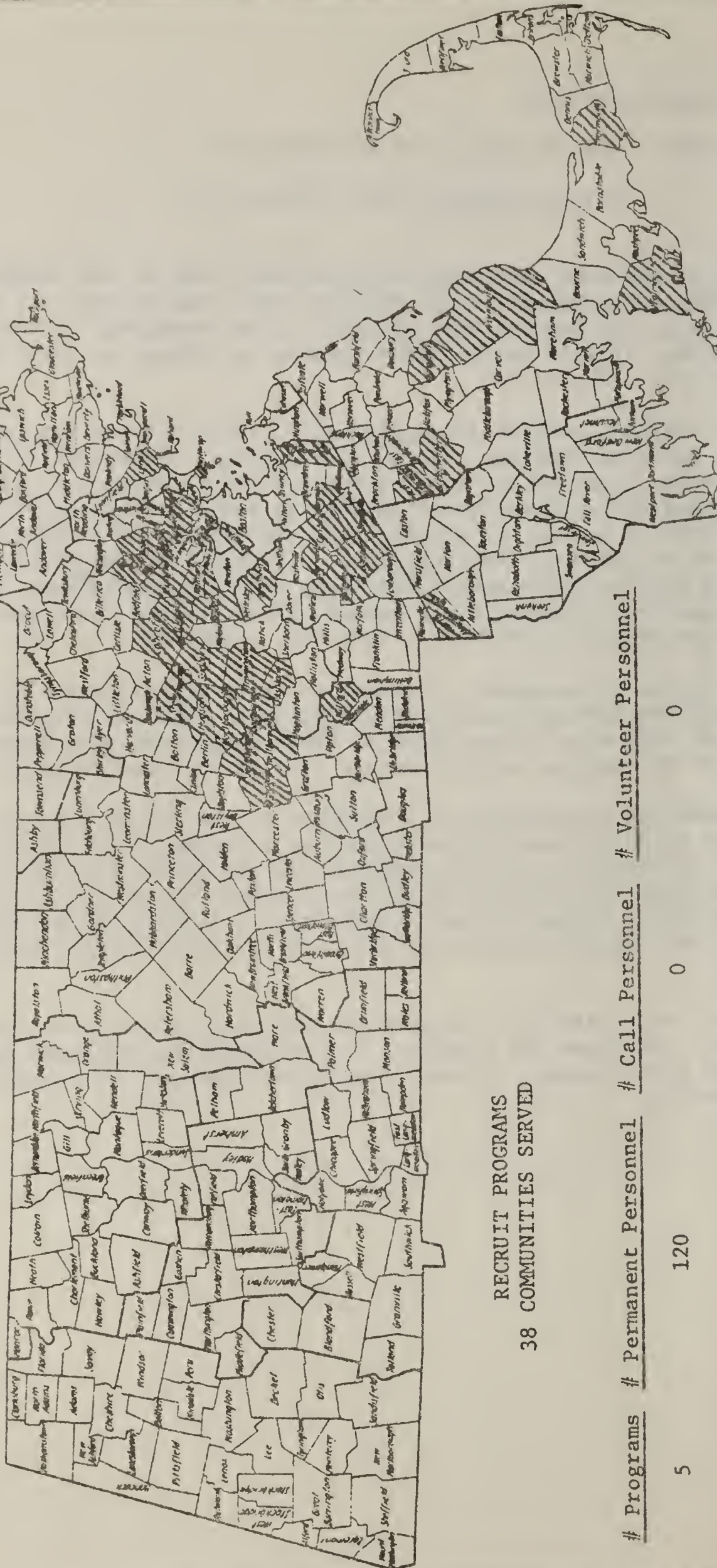
Again, because the Academy has no facilities of its own at which live fire training can be done, special thanks must be extended to Fire Commissioner George Paul of the Boston Fire Department for the use of their Moon Island Training Facility, and to Fire Chief James Brennan of the Salem Fire Department for the use of the Winter Island Training site. Special thanks should also be extended to Post Road Auto Parts of Marlboro for the unlimited use of their facilities.

During fiscal year 1979 five (5) programs were held with a total enrollment of 120 students. Of those 120 students, 115 successfully completed the program and received certificates. Those 115 students represent 38 communities within the Commonwealth.



# MASSACHUSETTS

CITY AND TOWN LINES



RECRUIT PROGRAMS  
38 COMMUNITIES SERVED

# Programs   # Permanent Personnel   # Call Personnel   # Volunteer Personnel

5

120

0

0

SCALE  
0 10 20  
MILES

Ashland	Winthrop
Bridgewater	Woburn
Burlington	Yarmouth
Cambridge	
Canton	
Concord	
Falmouth	
Framingham	
Hudson	
Kingston	
Lexington	
Lincoln	
Lynn	
Malden	
Marlboro	
Maynard	
Medford	
Milford	
Needham	
North Attleboro	
Northboro	
Norwood	
Plymouth	
Randolph	
Sharon	
Shrewsbury	
Southboro	
Stow	
Sudbury	
Walpole	
Waltham	
West Bridgewater	
Weston	
Weymouth	
Winchester	

# **COMMUNITIES SERVED - RECRUIT**





## Massachusetts Firefighting Academy



# The Commonwealth of Massachusetts

## Department of Education

59 Horse Pond Road, Sudbury, Massachusetts 01776

(617) 443-8926

## COMMUNITIES INVOLVED IN RECRUIT PROGRAM

July 1 - December 31, 1979

January 1 - March 11, 1980

July 1 - December 1979

Abington	Fairhaven	Marlborough	Stoughton
Arlington	Falmouth	Medford	Stow
Attleboro	Framingham		Sudbury
		Natick	
Burlington	Gardner	Needham	Walpole
		North Attleboro	Waltham
Canton	Hudson	Norwood	Watertown*
Clinton			Wellesley
Concord	Lincoln	Orange*	Weymouth
	Lynn		Wilbraham*
Danvers			Woburn

January 1 - March 11, 1980

Ashland	Falmouth	Medford
	Framingham	
Belmont	Foxborough	Needham
Bourne		
	Haverhill*	Somerville*
Centerville-Osterville		
Clinton	Ludlow*	Waltham
	Lynn	Watertown
Easton*		Wellesley
		Winchester

<u># Programs</u>	<u># Permanent Personnel</u>	<u># Call Personnel</u>	<u># Volunteer Personnel</u>
5	117	6	0

\* First time town has attended Academy.





Office of In-Service Training

Co-coordinators: John Corcoran, Fire Instructor III

Assistant coordinator: Richard Gassett, Fire Instructor II

In an effort to provide an awareness in the Commonwealth's fire service community of advancing technologies, the Academy provides an In-Service Program as a means to secure that end.

In short, one-or two-hour slide programs accompanied by student handouts and discussions, these programs serve as an alternative to the regional programs by bringing programs directly into a department during scheduled work hours for paid departments, and during scheduled drills for call and volunteer departments, to augment local training. The intent of the Academy is to reach every department in the Commonwealth, and this delivery system has been most effective in reaching the greatest number of firefighters possible as quickly as possible.

Programs currently being offered by the Office of In-Service Training are:

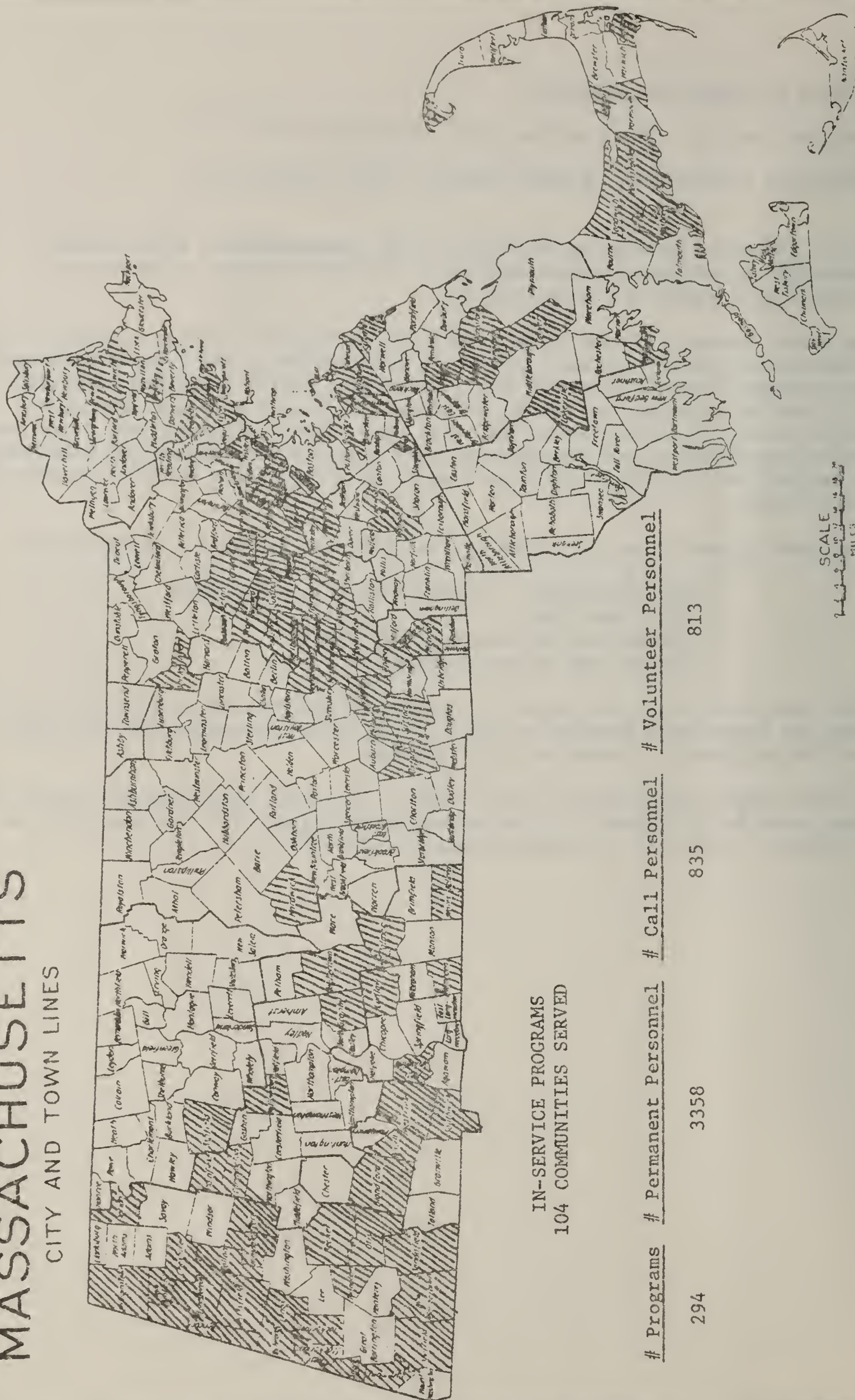
- DASH (Detectors: Automatic Safety in the Home)
- Only a Car Fire
- Introduction to Hazardous Materials
- Plastics and the Firefighter

The effectiveness of this type of programming can readily be seen when reviewing the fiscal year figures for 1979. This office presented a total number of 294 programs to a total of 5,526 students.

In that light, development is now underway for other type programs, which, when completed in the future, will be presented throughout the Commonwealth, and therefore provide for the continuance of this office.

# MASSACHUSETTS

CITY AND TOWN LINES



IN-SERVICE PROGRAMS  
104 COMMUNITIES SERVED

# Programs	# Permanent Personnel	# Call Personnel	# Volunteer Personnel
294	3358	835	813

294

3358

835

813

SCALE  
0 1 2 3 4 5 6 7 8 9 10  
MILES



Acton	Holland	Plympton
Alford	Hopedale	Provincetown
Arlington	Hopkinton	Quincy
Ashfield	Hudson	Richmond
Ashland	Hull	Rowley
Avon	Ipswich	Russell
Ayer (also Fort Deven)	Kingston	Salem
Barnstable County (Osterville,	Lakeville	Sandisfield
Cotuit, Hyannis)	Lanesboro	Sandwich
Becket	Lenox	Scituate
Belchertown	Lexington	Sheffield
Belmont	Lincoln	Shirley
Blandford	Ludlow	Somerville
Brookline	Lynn (General Electric)	Southboro
Cambridge	Marblehead	Southwick
Carver	Marlboro	Stockbridge
Chatham	Mashpee	Stow
Cheshire	Mattapoisette	Sudbury
Concord	Maynard	Sutton
Cummingham	Melrose	Tyringham
Dalton	Mendon	Upton
Dennis	Millbury	Wales
Egremont	Natick	Walpole
Everett	Needham	Waltham
Florida	New Ashford	Watertown
Framingham	New Marlboro	Wayland
Grafton	Newton	Wenham
Granby	Northboro	Westboro
Halifax	Otis	Westfield
Hampden	Oxford	Weston
Hancock	Bondsville	W. Springfield
Hanson	Peabody	W. Stockbridge
Hardwick	Peru	Weymouth
Hingham	Pittsfield	Williamsburg
Hinsdale	Plainfield	Williamstown

## COMMUNITIES SERVED - IN-SERVICE





## Office of Officer Training

Coordinator: Paul Anderson, Fire Instructor III

Robert Hamilton, Fire Instructor III

We are hearing more and more, at conventions, seminars, and in literature published for the fire service, recognized and respected members of the fire community echoing the same philosophy the Massachusetts Firefighting Academy has been proclaiming for some time. Weaknesses in the officer level of the fire service can be broken down into two general categories.

First, our system of promotion is backward. No other occupation comes to mind that promotes an individual and trains later. Unfortunately, most new officers have to fly by the seat of their pants, learning by trial and error experience, trying to learn through whatever training he is fortunate to find on his own. Without prior training the officer may encounter problems and circumstances which when handled improperly may cause irreparable damage to the attitudes, feeling, morale, and finally performance.

Secondly, we have not truly identified the role of the company officer. What little training the officer has been able to receive has usually centered around fighting fires. However, more and more today, authorities are recognizing the need for incorporating behavioral science into officer training, the human element of being a supervisor. Younger employees, better educated than ten years ago, are looking for more opportunities to participate in the decision and policies that affect them. Officers at all levels must be prepared to recognize the needs of the subordinates as they relate to the efficiency of the organization. There is much more of a challenge to being an officer today than a decade ago.

It is in these general areas that the officer program of the Academy is aimed at expanding to meet the needs of the fire service.

The Academy has designed and offers several programs geared to that leadership perspective. Perhaps the most successful of the officers programs has been "Today's Company Officer", a 36-hour program to present a wide range of topics pertinent to both current officers and those aspiring to be officers. Other programs such as "Leadership" and "Fireground Tactics and Strategy" deal with specific portions of the job in a much more in-depth manner. These programs are all offered on a regional course basis.

In addition, the Academy also instituted a Fire Officer Seminar Series in fiscal year 1979 to deal with various aspects of the job such as:

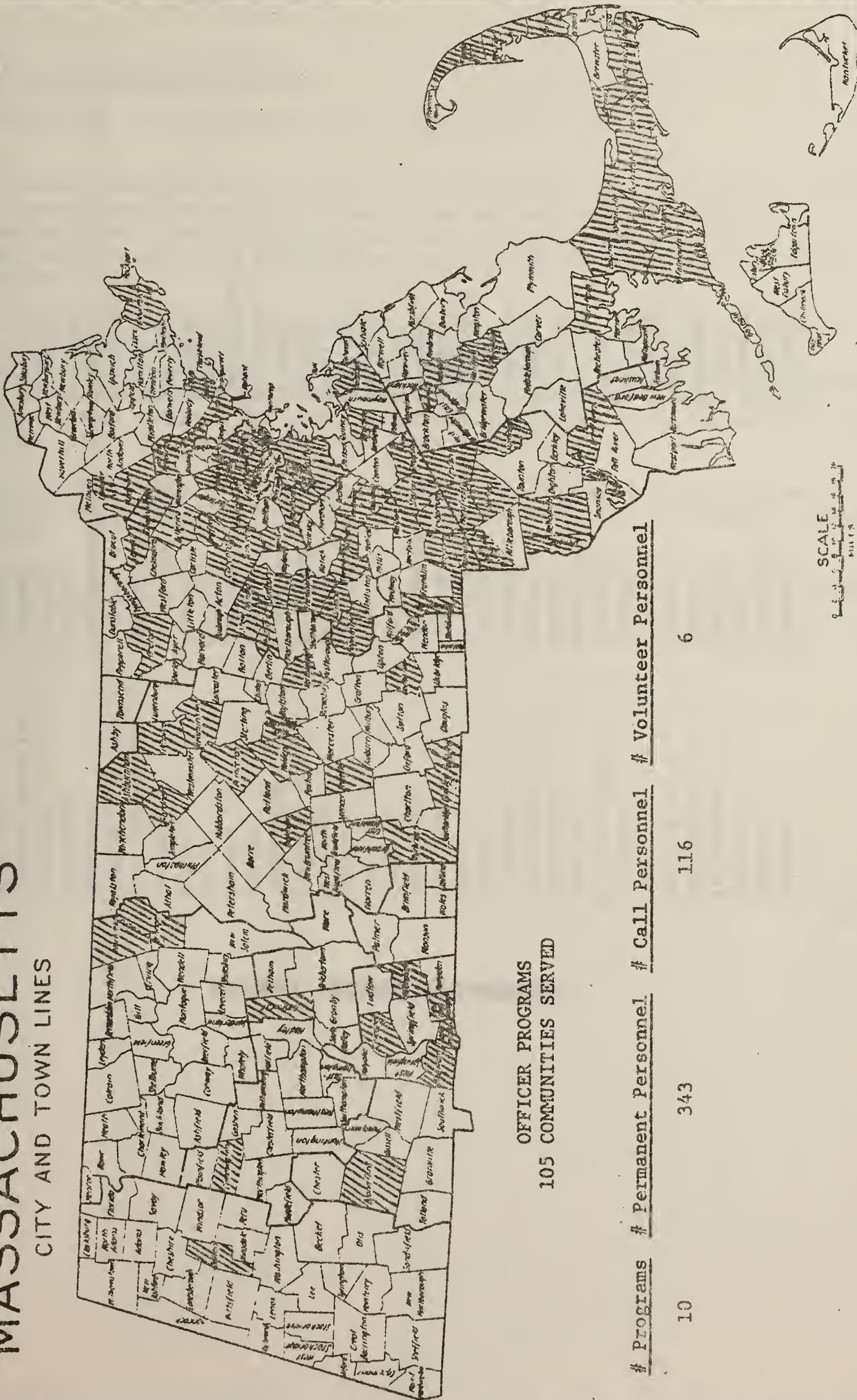
- Improving Fireground Operations
- Public Education
- Arson - The Fire Officer's Responsibility
- Leadership Needs
- Motivation.

Three of the five programs of the series were offered in fiscal year 1979 with the remaining two scheduled for fiscal year 1980. Interest in this series has been such that the entire series will be scheduled again.



# MASSACHUSETTS

CITY AND TOWN LINES



OFFICER PROGRAMS  
105 COMMUNITIES SERVED

# Programs	# Permanent Personnel	# Call Personnel	# Volunteer Personnel
10	343	116	6

10

343

116

6

SCALE  
0 5 10 15 20  
MILES

Agawam	Gardner	Plainville
Amherst	Gloucester	Plympton
Andover	Groton	Princeton
Arlington	Halifax	Raynham
Ashburnham	Hanson	Rehoboth
Ashland	Harwich	Salem
Avon	Hingham	Sandwich
Hyannis	Holden	Seekonk
W. Barnstable	Hopedale	Sharon
Bedford	Hopkinton	Sherborn
Bellingham	Hudson	Somerset
BillERICA	Lawrence	Stoneham
Blandford	Leicester	Stoughton
Boston	Leominster	Stow
Bourne	Lexington	Sturbridge
Braintree	Lincoln	Sudbury
Brookline	Longmeadow	Tewksbury
Cambridge	Lowell	Truro
Chatham	Lynn	Walpole
Cheisea	Lynnfield	Otis AFB
Chicopee	Malden	Onset
Concord	Mansfield	Warwick
Cummington	Mashpee	Webster
Dalton	Maynard	Wellfleet
Dennis	Medford	West Boylston
Dover	Melrose	Weston
Dudley	Newton	Westwood
Eastham	North Attleboro	Whitman
East Longmeadow	Northboro	Wilbraham
Easton	Northbridge	Winchester
Falmouth	North Reading	Woburn
Fitchburg	Norton	Wrentham
Foxboro	Norwood	Yarmouth
Cushing Hospital	Oakham	
Freetown	Orange	

# COMMUNITIES SERVED - OFFICER



## Office of Instructor Services

Coordinator: Paul Anderson, Fire Instructor III

It is most important that the instructors responsible for teaching the various programs of the Academy, regardless of the delivery system, not only be knowledgeable in the particular field with which they are teaching but that they also are effective instructors, familiar with the techniques and tools of teaching.

An Office of Instructor Services is maintained to both train new instructors and to support those on staff. The Academy offers a 36-hour methodology course designed to prepare personnel in the rudiments of instructing. Students attending this program do not necessarily go on to become Academy instructors... many training officers for various departments partake of the program to better assist themselves in their job with their department.

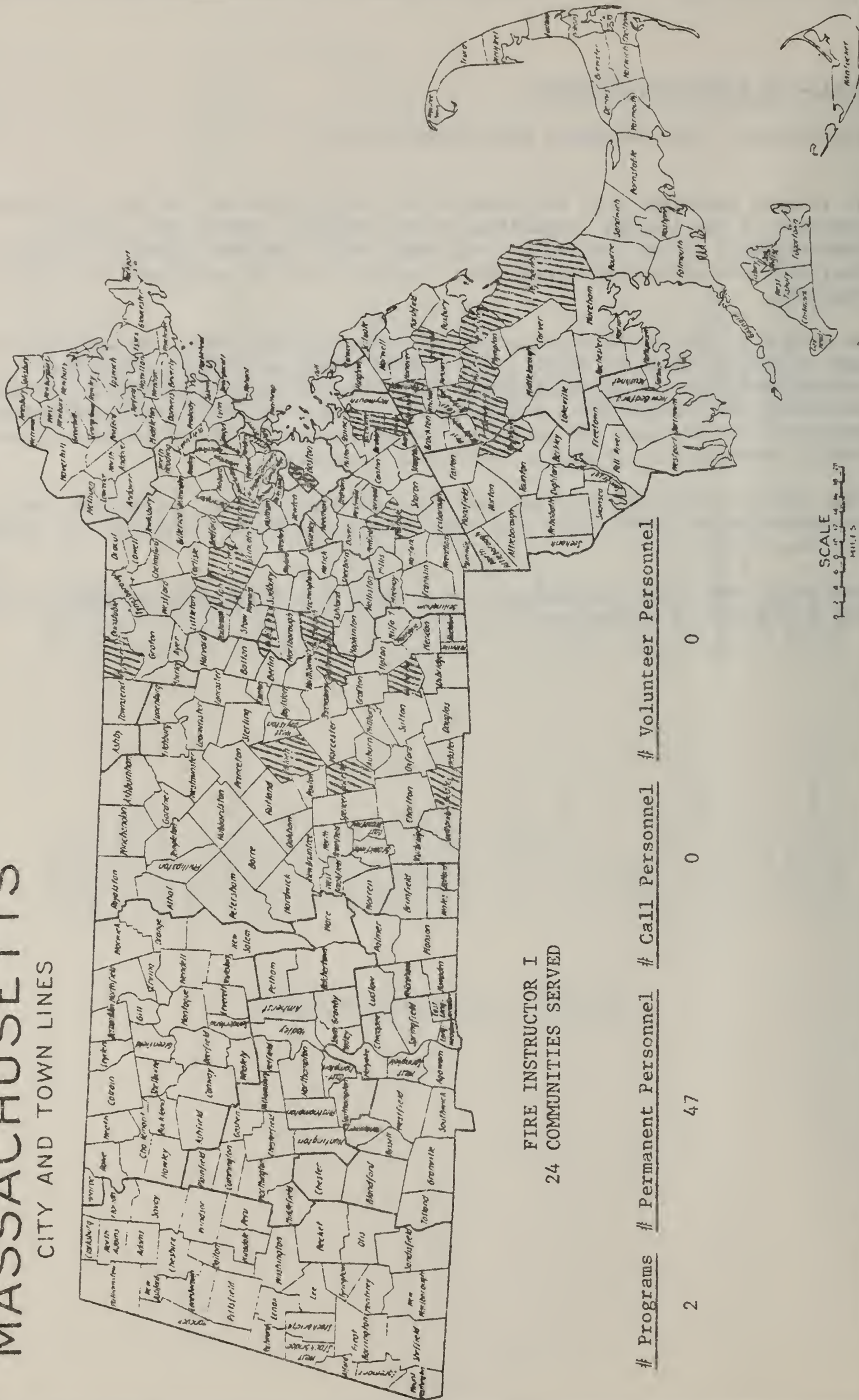
This office also holds the responsibility for maintaining, evaluating, and up-grading staff instructors once they have successfully completed the instructors program.

In fiscal year 1979, the Academy held a total of 2 instructor programs, certifying a total of 25 instructors.



# MASSACHUSETTS

CITY AND TOWN LINES



FIRE INSTRUCTOR I  
24 COMMUNITIES SERVED

# Programs	# Permanent Personnel	# Call Personnel	# Volunteer Personnel
2	47	0	0

SCALE  
0 1 2 3 4 5  
MILES

Abington  
Acton  
Braintree  
Bridgewater  
Brookline  
Concord  
Dudley  
East Bridgewater  
Halifax  
Holbrook  
Holden  
Hudson  
Kingston  
Leicester  
Lexington  
Northbridge  
Pembroke  
Pepperell  
Plymouth  
Raynham  
Rockland  
Southboro  
Walpole  
Westboro

**COMMUNITIES SERVED - INSTRUCTORS**





**OFFICE  
OF  
TECHNICAL SERVICES**

**STEPHEN D. COAN**  
**Deputy Chief**

**PAMELA A. HUNDE**  
**Administrative Assistant**



## Office of Technical Services

Deputy Chief Stephen D. Coan

Administrative Assistant Pamela A. Hunde

The Office of Technical Services has a wide range of responsibilities and duties ranging from identification of training needs and program development, through acting as a liason to various federal, state, and local agencies.

### Program Development

Fire training needs are identified essentially, but not exclusively, for the fire service and programs are designed and developed to meet those needs. Based on the recommendations of the technical committee's final report for a "Model Statewide Plan to Provide the Education and Training Required to Implement the Professional Qualifications Fire Service Standards", this office supervised the design and development of various programs to meet the fire service needs throughout the state.

In addition, the Academy has long recognized the potential of entities other than the fire service in the eventual solution of the fire problem. This office has been charged with the responsibility of involving individuals from other than the fire service both to acknowledge their vulnerability to fire and their incumbency towards a solution. During fiscal year 1979 this office has been in contact with representatives of many industries, health care facilities, police and correctional offices, as well as members of the Coast Guard, state departments of mental health and juvenile corrections to assist them in their fire safety training needs.

### Liason and Coordination

This office has been instrumental in nurturing a growing cooperation between the Academy and various organizations with an interest in all aspects of the fire problem.

During 1979, this office organized several meetings with the staff of the Academy and the staffs of such organizations as Factory Mutual, and the National Fire Protection Association, in an effort to organize our efforts towards improved fire training and education. It is hoped that by serving as an intermediary, this office will be able to expand our resources for much needed projects.

The following pages briefly describe the functions and activities of the various sub-offices under the auspices of the Office of Technical Services.



## Office of Special Programs

### A. Seminars

While one of the primary functions of the Office of Technical Services is to identify fire training needs, it is also most important to identify the most realistic and effective method of delivery.

In most cases, programs are developed with an eye towards use as a regional program (see "Regional Programs", Office of Professional Development), since this is one of our most effective methods of delivery. However, some programs and services are best presented in a seminar format to a specific audience. During fiscal year 1979 the Academy, through this office, designated several topics to be handled within this seminar format. In this manner, those people who have a need and desire to take advantage of topics of interest or concern may do so from experts in the various field of study.

The following special programs were designed in-house, hosted and sponsored solely by the Academy for fiscal year 1979:

Tanker Shuttle Operation  
Fire Loss Management  
Elevator Emergencies for the Firefighter  
Fire Officer Seminar Series

In addition to our in-house seminar, this office's association and constant cooperation with other organizations both within and outside of this state, have resulted in the Academy co-sponsoring a number of seminars of interest to the fire service:

Handling Hazardous Materials Transportation Emergencies - Sponsored on behalf of the National Fire Protection Association.

The Manager/Fire Chief Leadership Seminar - Sponsored in conjunction with the International City Managers Association, the International Association of Fire Chiefs, and the United States Fire Administration.

Evaluating your Local Fire Department - Sponsored in conjunction with the Research Triangle Institute and the National Fire Protection Association.

### B. Special Projects

This office also has the responsibility of keeping lines of communication open with various agencies so as to provide technical assistance on projects of concern to the fire service. In fiscal year 1979 the Academy was awarded a grant by the Factory Mutual System to expand and update our Fire Investigation programs. Additionally, work was started with the cities of Revere, Chelsea, Lynn, and Salem on federal grant to receive funding to provide training for the coastal zone management of hazardous materials.

Also in fiscal year 1979, work was started on one of the largest projects of this type, in conjunction with the state's Department of Mental Health. With the cooperation of experts in the field, the Academy is developing a fire safety program for both staff and occupants of various residences within the Department of Mental Health.

#### C. Civil Service

This office assists the Division of Personnel Administration in administering the Strength and Agility exams for those personnel seeking fire department employment with "Civil Service" communities. During fiscal year 1979, a total of 4,037 people were tested both at our Stow facility and at the Boston Fire Departments' Moon Island Training Center.



## Office of Curriculum Development

Coordinator: Thomas J. Potenza, Fire Instructor III

After program needs have been identified, this office is responsible for designing and developing program packages which include student and instructor outlines and lesson plans, hand-out materials, and audio-visual aids. Once programs have completed initial development, they are pilot-tested for possible additions and revisions.

In addition to program development this sub-office also has responsibility of maintaining and upgrading programs which are already in the field. Because of the technical nature of the material being taught for the fire service, close watch must be maintained on all of our programs to insure that they have not become outdated.

During fiscal year 1979, the Office of Curriculum Development paid special attention to the following programs:

### 1. Small Aircraft; Crash/Rescue/Fire

With the cooperation of the Federal Aeronautics Commission, the Massachusetts Aeronautics Commission, and the Logan Airport Fire Department, the Academy developed and pilot-tested this program designed to teach firefighters some of the basics of handling an incident involving small aircraft. While the majority of fire departments throughout the Commonwealth do not have the responsibility of an airfield, with air traffic exceeding 100,000 flights per year just from small aircraft, the odds are very good that any department could be faced with some sort of small aircraft incident. This program has now completed the pilot-test stage and is available as a regional program.

### 2. Fire Inspection I, II, and III

Development work was completed on a fire inspection program in accordance with Levels I and II of NFPA 1001, Firefighter Professional Qualification Standard. The program is currently being pilot-tested and some revisions are expected prior to this program being put into the field as a regional program. A program in accordance with Level III of Standard 1001 will be developed at a later date.

### 3. Elevator Emergencies for the Firefighter

Review work was done on a completed program concerning elevator safety and rescue, developed by Lt. John O'Donaghue of the Cambridge Fire Department. The program was pilot-tested to a relatively small group and was extremely well received. Plans have been made to offer this program on a seminar basis throughout the State.



#### 4. Protective Breathing Apparatus

Due to changes and innovations in self-contained breathing apparatus for the fire service in the past three years, this office has revised the regional Protective Breathing program to reflect the new apparatus and techniques. Changes and revisions were also included in this portion of the Recruit Training program to provide the most up-to-date material available.

#### 5. Natural Gas

Work was temporarily curtailed on this "In-Service" program designed to acquaint firefighters with the gas industry and their procedures in the area of natural gas. Due to shortages, both financially, and in terms of personnel, development on this program had to be shelved with only the first portion completed. When entirely completed the program hopes to make the firefighter aware of the problems they may face when called to gas incidences as well as recommended procedures for fire departments safe handling of such incidences. The completed portion of the program was presented at the February MIFDI meeting and was well received. It is hoped that this program can be completed at a later date.

## Office of Industrial Training

Coordinator: Walter H. Connery, Fire Instructor III

In keeping with the Academy's belief that the fire problem is not the concern of just the fire service and that the solution cannot be solely the concern of the fire service either, this office has expanded the Academy's role of fire training and education for the state's fire service, to include the important area of Industrial Fire Training.

The industrial fire brigade or loss control unit provides an important first line of defense in fire protection when an incident occurs by confining the problem to its area of origin, evacuating personnel, or extinguishing the fire if it's small enough. A fire in any industrial concern in any community could easily represent a major loss of revenue to the industry as well as a serious economic strain to the entire community. For that reason it is important that there be a feeling of cooperation between industrial fire brigades and their local fire departments.

That is one of the major reasons for the effectiveness of the Academy's Industrial Fire Training program. While there are a number of Industrial Fire Training Schools throughout the country, the Academy is in the unique position of being able to foster that necessary cooperation between an industry and their local fire department by informing and including a local department in any brigade training.

Perhaps the most important aspect of the Industrial Fire Training Program is the fact that the program is tailored to the needs of each individual industry. Upon first contact with our Industrial Program Coordinator, a meeting is scheduled to determine the particular nature, hazards, and complexities of the individual industry and how to provide the best possible program.

Upon approval of the proposed program, the training is then conducted by fire instructors of the Academy. In some cases the training is conducted on the site of the industry but in most cases it is conducted at the Academy's Basic Training Facility in Stow where practical evolutions are run in the same facilities used by municipal firefighters, fostering a mutual respect for each other's expertise.



## LNG LPG Firefighting School

Coordinator: Thomas H. Rinoldo, Fire Instructor III

One of the major accomplishments of the last fiscal year was the opening of the new LNG LPG Firefighting School and the beginning of classes. The facility was officially opened on April 27 during formal dedication ceremonies which included speeches by Chief of Fire Training Joseph L. Donovan, Hopkinton Fire Chief Arthur Stewart, Wilbur Walls of the National Fire Protection Association, Road Twedell of Distri-Gas, Ken Taylor of Gas Systems, Inc. (New Hampshire) and, speaking on behalf of Governor King, Joseph Fitzpatrick, State Energy Advisor.

In the weeks after the dedication ceremonies, time was spent training instructors for both the classroom sessions and the practical sessions. Two pilot-tests were completed at the end of fiscal year 1979 with both firefighters and gas industry personnel in attendance. This facility, eight years in the making, is the first of its kind in the world.

Basically the school utilizes three major exercises:

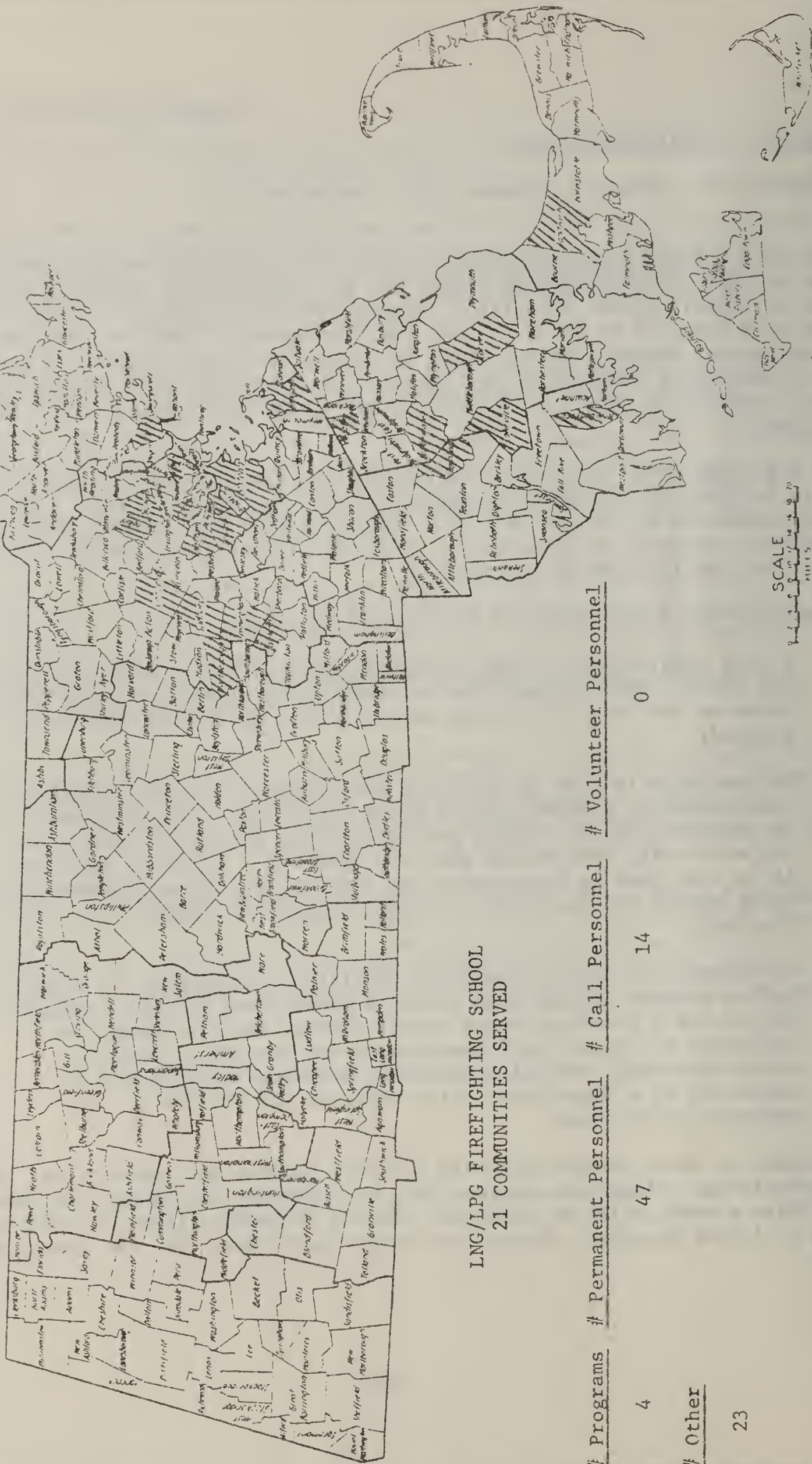
1. A prop simulating a broken or leaking pipe or flange uses both LNG and LPG to train students how to advance and expose a controlling valve so that the flow of gas can be shut down and the fire extinguished.
2. An open pipe is used to discharge both liquid and vapor gases to demonstrate to students what a vapor cloud looks like (when one is present), how to control and/or disburse the cloud using water fog which will prevent the gas from reaching a source of ignition. It is also used to demonstrate how ignition and flame propagation occur should the gas reach a source of ignition some distance from the leak.
3. The final prop, which makes this facility truly unique, is a 2000 gallon propane storage tank which is constructed in such a manner to provide a four-inch water jacket whereby positive means are available to control safe temperature and pressure conditions within the tank, yet allow realistic pressure buildups and the operation of a three-inch relief valve at 250 PSI due to fire exposure on the tank.

Response to this program from both the fire service and industry has been overwhelming. Classroom sessions will be scheduled throughout the state, two or three a week, with the practical session following either the next day or the following Saturday, through the entire year except for the Winter months.



# MASSACHUSETTS

CITY AND TOWN LINES



LNG/LPG FIREFIGHTING SCHOOL  
21 COMMUNITIES SERVED

# Programs	# Permanent Personnel	# Call Personnel	# Volunteer Personnel
4	47	14	0

# Other

23

Abington  
Arlington  
Ashland  
Boston  
Bridgewater  
Burlington  
Carver  
Concord  
Framingham  
Hingham  
Lakeville  
Lynn  
Malden  
Marlboro  
New Bedford  
Newton  
Raynham  
Sandwich  
Sudbury  
Waltham  
Woburn

**COMMUNITIES SERVED - LNG/LPG FIREFIGHTING SCHOOL**





## Massachusetts Firefighting Academy



# The Commonwealth of Massachusetts

## Department of Education

59 Horse Pond Road, Sudbury, Massachusetts 01776

(617) 443-8926

## LNG/LPG FIREFIGHTING SCHOOL

July 1, 1979 to November 30, 1979

Acton	Hanson	Pepperell
Amherst	Haverhill	Plymouth
Ashland	Hingham	Princeton
Auburn	Holliston	Randolph
Belmont	Holyoke	Reading
Billerica	Hopkinton	Rochdale
Boston	Hubbardston	Rockland
Bourne	Kingston	Rutland
Bridgewater	Lakeville	Savoy
Burlington	Lawrence	Seekonk
Cambridge	Leicester	Sharon
Canton	Lexington	Sherborn
Chelmsford	Littleton	Shrewsbury
Chelsea	Longmeadow	Somerset
Cheshire	Lowell	Somerville
Comm. Of Mass.	Lynn	Southboro
Cushing Hospital	Mansfield	Southbridge
Dalton	Marlboro	Spencer
Dartmouth	Maynard	Sterling
Dover	Medfield	Stoneham
Dudley	Medford	Sudbury
Dunstable	Middleboro	Swansea
East Longmeadow	Milford	Tyngsboro
Everett	Millbury	Uxbridge
Fall River	Millis	Walpole
Falmouth	Montgomery	Watertown
Fitchburg	Nantucket	Weston
Fort Devons	Natick	Weston (Police)
Foxboro	New Bedford	West Stockbridge
Framingham	Norfolk	Winchester
Freetown	Northboro	Windsor
Gardner	Northbridge	Winthrop
Great Barrington	Norton	Woburn
Granville	Oakham	Worcester
		Yarmouth

#Permanent Personnel

#Call Personnel

#Vol. Personnel

#Other

457

248

36

73



## Educational Resource Center

Coordinator: Margaret Winsor, Fire Instructor Aide

This office provides support to both the development of programs and to the programs which are already in the field. Consisting of a library of books, magazines, pamphlets, films, and other research material, a media center where graphics and films are designed and developed, and a print shop where all of our program materials are printed in-house, this office contributes a great deal to the self-sufficiency of our various programs and projects.

The library contains a wide variety of printed material for use in program research and which can be utilized on Academy premises. Most all of our films with the exception of a few restricted films, are lent out on a regular basis either to supplement an Academy training program, or for assistance to a local department in their own training.

Due to a number of new pieces of equipment added to our media center, we are now more self-sufficient in developing the audio-visuals for our programs. We can now duplicate program slides in-house as well as taking and developing a greater number of types of slides for programs.

The print shop continues to provide the in-house printing capabilities for all program hand-outs, lesson plans, reports, and course announcements.



## Introduction

The purpose of this study is to investigate the effects of the proposed system on the performance of the participants.

The study was conducted in a laboratory setting. The participants were divided into two groups: the control group and the experimental group. The control group used the standard system, while the experimental group used the proposed system. The performance of the participants was measured using a series of tasks. The results of the study are presented in the following sections.

The first section of the results presents the data for the control group. The second section presents the data for the experimental group. The third section presents the comparison between the two groups. The fourth section presents the conclusions of the study.

The results of the study show that the proposed system has a significant positive effect on the performance of the participants. The experimental group performed significantly better than the control group on all tasks.

The study concludes that the proposed system is a viable alternative to the standard system. The proposed system should be used in future studies.

# MASSACHUSETTS FIREFIGHTING ACADEMY FISCAL YEAR 1979

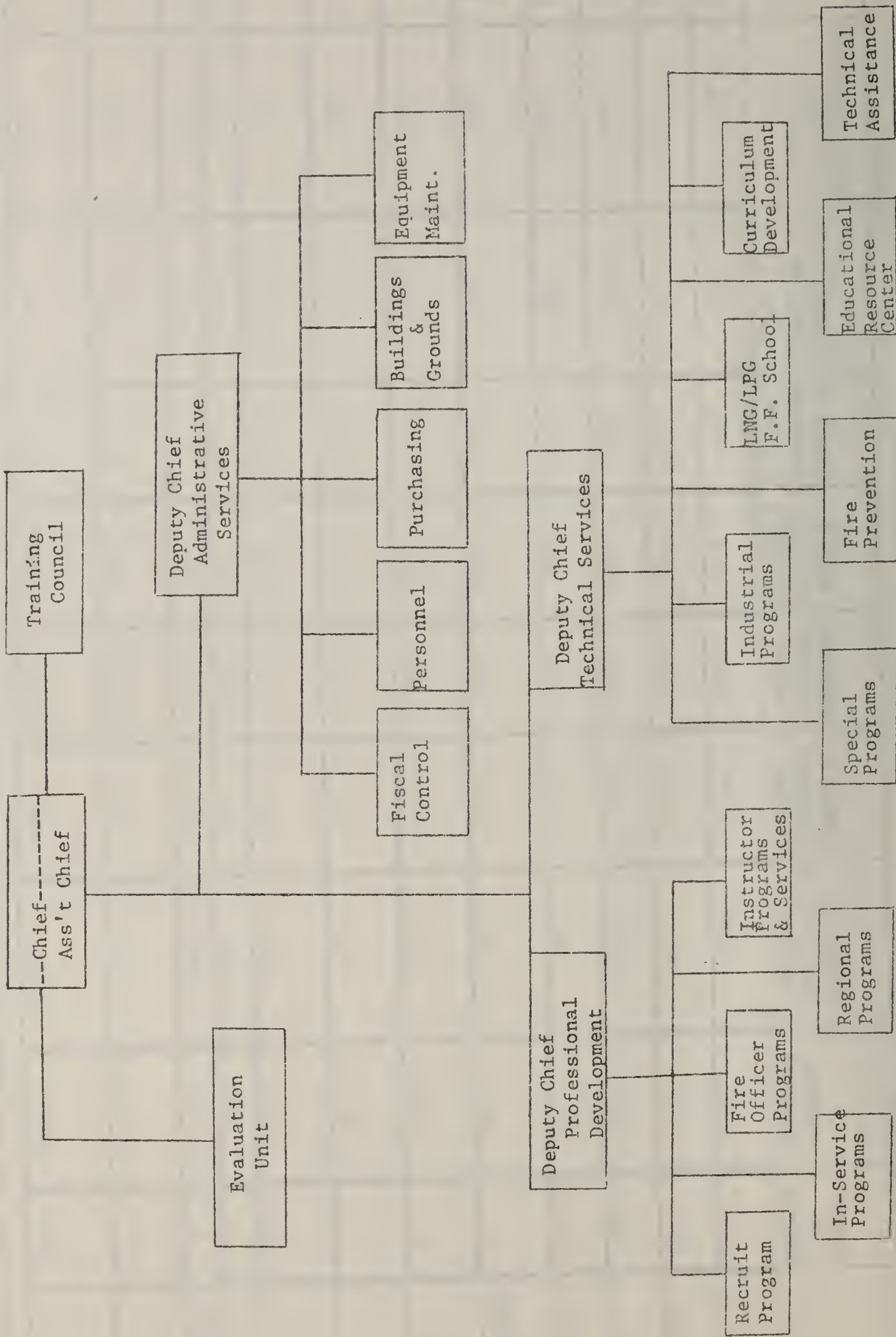
## APPENDIX I

PROGRAM	NUMBER OF COURSES	NUMBER ENROLLED	NUMBER OF CERTIFICATES AWARDED	NUMBER OF PERMANENT PERSONNEL	PERMANENT CONTACT HOURS	NUMBER OF CALL PERSONNEL	NUMBER OF VOLUNTEER PERSONNEL	NUMBER OF OTHER OR UNSPECIFIED	CALL/VOLUNTEER/ OTHER CONTACT HOURS	TOTAL CONTACT HOURS
RECRUIT	5	120*	90*	120*	33600	N/A	N/A	N/A	N/A	33600
IN-SERVICE	294	5042	N/A	3358	10074	835	813	36	5052	15126
REGIONAL	66	2072	1492	396	5898	1488	188	N/A	26682	32580
INDUSTRIAL	12	387	387	N/A	N/A	N/A	N/A	387	19646	19646
POLICE/ CORRECTIONAL	26	290	290	N/A	N/A	N/A	N/A	290	1528	1528
SPECIAL PROGRAMS	44	2667	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LNG/LPG SCHOOL	4	84	52	47	564	14	N/A	23	444	1008
PHYSICAL EXAMS	N/A	4037	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TODAYS CO.	4	96	62	80	2880	16	N/A	N/A	576	3456
OFFICER SERIES	6	594	369	263	1578	100	6	N/A	636	2214
INSTRUCTOR PROGRAMS	2	47	25	47	1692	N/A	N/A	N/A	N/A	1692
TOTAL	463	15436	2792	4311	56286	2453	1007	736	54564	110850

\*Fifth Recruit class not concluded until Fiscal class 1980



# Appendix II





## FISCAL YEAR 1979 - ACTUAL EXPENDITURES

Office of Chief of Fire Training	\$ 63,341.00	12.67%
Office of Administrative Services	89,738.00	17.95%
Office of Professional Development	244,317.00	48.87%
Office of Technical Services	<u>102,536.00</u>	<u>20.51%</u>
	\$499,932.00	100.00%

